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A trusted leader in measurement and calibration solutions.



meriLink[™] software

Tom doesn't think a figure is needed

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General information

Notification Statements

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Glossary

Words and phrases with their definitions.

Button or key

- A **button** always refers to an area on the screen that you can click to select functionality.
- A **key** always refers to hardware push-buttons on the keyboard that you can press.

Dashboard

The dashboard is the initial window that you see in **meriLink** software.

Firmware

Firmware is a type of software that is stored on hardware. Both meriGauge plus and meriSense have firmware. meriLink is a software program that can communicate with their firmware and change or update it as needed.

Meriam Calibration

Meriam calibration refers to any calibration completed at Meriam with *Meriam traceability*. Meriam calibration includes:

- Oven calibration.
- Multipoint Meriam adjustment.

User Calibration

User calibration refers to any calibration done outside of Meriam with *non-Meriam traceability*. User calibration includes:

• Multipoint user calibration or adjustment.

Features

General notes about meriLink

How does meriLink benefit you?

With meriLink, you can configure your gauge or sensor to display information the way your company needs to use it.

meriLink can configure data logging requirements for Data Log Lite (limited options) and Data Log Pro (more options).

Microsoft Word 2003 or later required

The meriLink program uses Microsoft Word to create the two reports:

- 1. As Left/As Found Configuration Report for meriGauge Plus
- 2. As Left/As Found Configuration Report for meriSense.

USB cable and your computer

Connect the USB cable to meriGauge plus and to your computer in order to configure meriGauge plus and meriSense.

DANGER Connect the USB cable to meriGauge plus and to your computer in order to configure meriGauge plus and meriSense using the meriLink software. (see 9R487 for same wording)

NOTICE

Don't turn off meriGauge plus

Do not turn off the power on the meriGauge plus while the gauge is communicating with meriLink. The meriGauge plus displays dashes and the word **OFFLINE** while meriLink is communicating with meriGauge or meriSense.

- Close meriLink first, disconnect the USB, and turn off the meriGauge plus.
- As long as **OFFLINE** remains visible, **Auto Off** is suspended.

NOTICE

Watch for the battery outline

Do not attempt to modify or update your meriGauge plus or meriSense when only the outline of the battery icon is visible.

Note: the battery outline appears as soon as meriLink and meriGauge connect.

Watch for a Yellow dot on a tab

A yellow dot appears on a tab in meriLink to indicate that you have made changes to settings but you have not saved them yet.

Figure needed?

Click the **Write** button to save the changes you made.

Year-Month-Date format

meriLink displays the date in year-month-day format.

For example: 2016-04-22 (YYYY-MM-DD).

Hours:Minutes:Seconds format

meriLink displays the time in Universal Coordinated Time (UTC) 24-hour format.

For example: 15:05:45 UTC (hours:minutes:seconds).

Connection status displayed on the dashboard

Attached devices

meriLink displays the outlines of *attached* devices on the right with descriptions appearing alongside. See the figure below.



No sensor attached

Notice the bold outline of meriGauge plus contrasted with the dotted outline of an unattached meriSense. See the figure below.



No attached devices

meriLink displays no outlines of devices on the right side.

See the figure below.



Buttons on the dashboard

meriLink buttons open windows

The buttons are described below.

Application button



The **Application** button displays alert icons:

• It may display a green alert icon to indicate an *Available* Software Update is available. NOTICE

"PLEASE BE ADVISED! If you choose to install a new version of the software package at this time, you will lose any unsaved configuration information to a file or transmit it to the currently connected device."

• It may display a red alert icon to indicate, "There is no connection to the update server. This is usually caused by the PC not having internet connectivity or the server may be temporarily unavailable."

The **Application** button displays a screen with three sections:

- About.
- Language Selection.
- Available Software Update.

Update button



The **Update button** may display an alert icon:

- It may display a green alert icon to indicate an update is available for the firmware in the gauge or the sensor.
- It may display a red alert icon to indicate, "There is no connection to the update server. This is usually caused by the PC not having internet connectivity or the server may be temporarily unavailable."

The **Update button** displays a screen with two sections:

- The meriGauge section.
- The meriSense section.

Note: These sections alert you to new software updates for the gauge and for each attached sensor.

Configuration button



The **Configuration button** may display one alert icon:

 It may display a yellow alert icon to indicate you have changed a setting and you have not yet saved the setting to meriGauge, meriSense, or to your computer.

The Configuration button displays a screen with two tabs:

- meriGauge or the name you assigned to it.
- meriSense or the name you assigned to it.

Note: These tabs offer you various settings to configure each device.

User Calibration button



The User Calibration button may display one alert icon:

• It may display a yellow alert icon to indicate you have changed a setting and you have not yet saved the setting to meriGauge, meriSense, or to your computer.

The User Calibration displays one screen with this information:

- Live Reading.
- Restore Factory Defaults.
- Choose Calibration Unit.
- Begin and Apply calibration.
- Factory Calibration Information.
- User Calibration Information.

Data Log buttons

Data logging may display three different buttons depending on what you ordered or on what you add-on later.

The **Data Log** button displays when no sensor is attached to meriGauge.



The **Data Log Lite** button displays when you attach a sensor. This version of Data Log is free but has limited options.

The **Data Log Lite** button may display a yellow alert icon <mark>to</mark> indicate you have changed a setting and you have not yet saved the setting to meriGauge, meriSense, or to your computer.



The **Data Log Pro** button displays when you order it installed or after you purchased an Activation Key Number from your local distributor or the Meriam Sales Team.

The **Data Log Pro** button may display a yellow alert icon <mark>to</mark> indicate you have changed a setting and you have not yet saved the setting to meriGauge, meriSense, or to your computer.



Passwords

Overview of passwords

Passwords are not required to use the meriGauge plus or meriSense.

- Each device (meriGauge plus or meriSense) can have its own unique 16-character password. You may use from 1 16 characters: letters, numbers, or symbols, and uppercase and lowercase.
- Each device can have its password enabled or disabled independently from any other device.
- meriLink retrieves the passwords stored on the meriGauge plus and meriSense.

meriLink uses the password on meriGauge

If you choose to enable the **Password Required For Future Access,** then meriLink will request a password for the following actions:

• To modify a gauge's configuration.

Note: This action includes saving to or loading from a file.

• To update the software on a gauge.

meriLink uses the password on meriSense

If you choose to enable the **Password Required For Future Access**, then meriLink will request a password for the following actions:

• To modify the sensor's configuration.

Note: This action includes saving to or loading from file.

- To update the software on the sensor.
- To calibrate the sensor.

meriLink requests a password

If you choose to enable the **Password Required For Future Access**, then meriLink will request a password whenever you modify a configuration, update software, or calibrate a device.

- Once meriLink accepts a password for one of those actions, the device remains unlocked until it is disconnected.
- If you enter the password on one screen, meriLink unlocks that device on its other screens as well.

Data Log Lite has no password

meriLink does not use a password for **Data Log Lite** since it cannot make any changes to the gauge or sensors.

Request a recovery password

Forgot the password for a device?

- If you forget a password, contact Meriam to generate a recovery password for you to unlock the device.
- A recovery password disables the password until you turn it back on. Then, **meriLink** will prompt you to enter a new password.

• Call + 1 216 281 1100 or send an e-mail to sales@meriam.com.

Only valid during the day

The recovery password is only valid during the day it is issued.

User Calibration—For authorized personnel only

What does "Calibration Enabled" refer to?

- With a check in the box, **Calibration Enabled** displays the *Live Reading* with your current user calibration applied.
- Without a check in the box, it displays *Live Reading* without your user calibration.

Restore Factory Defaults

This button clears your user calibration from the meriSense.

Choose Calibration Unit

- Select the calibration reference units.
- This does not affect or depend on the configuration units.

Begin button...Apply button

- 1. Click Begin.
- 2. Select the point.
- 3. Apply reference pressure within the range shown.
- 4. Enter the reference value.
- 5. Save the point.
- 6. Repeat steps 2-5 until you are done. (You have to change at least one point.)
- 7. Click the **Apply** button.

Note: If you click the **Back** button with information in any of the five boxes, an alert appears.

Configuration for meriGauge plus

The Names field

You can assign your own company designations to each meriGauge plus gauge.

Sync PC time to Gauge

- Click to update meriGauge time and date with your computer.
- The display and data logging use this time and date.

Timeouts

- **Backlight:** the default setting is *1 Minute*.
- Auto Off (Automatic Off): the default setting is Always On.

Display Functions: Enable or Disable

- Min/Max
- Accuracy
- Tare
- Average
- Rate of Change
- Time & Temp
- Allow zero adjust (ø)

As Left/As Found Configuration Report

You can review a summary of the configuration of the gauge when it is first connected and the changes you made in the **As Found/As Left Report** for meriGauge plus.

Note: Depending on the speed of your computer, you may have to wait for it to appear.

Open and Save / Read and Write Configurations

- **Save** refers to saving new configuration data to an XML file format on your computer and **Open** refers to opening configuration data that you saved on your computer.
- **Read** and **Write** refer to reading configuration data from a meriGauge plus or writing to it.

Configuration for meriSense

The Names field

You can assign your own company designations to each meriGauge, asset number, naming scheme, and so on.

Enabled Units

Select or deselect the engineering units to view on the meriGauge plus display.

- The All button selects all engineering units.
- The None button deselects all engineering units.

Two User Defined Units

Users can define text and multiplier for two non-standard or unsupported display units.

Note: multiplier \times PSI = the displayed value.

As Left/As Found Configuration Report

You can review a summary of the configuration of the sensor when it is first connected and the changes you made in the **As Found/As Left Report** for meriSense.

Note: Depending on the speed of your computer, you may have to wait for it to appear.

Open and Save / Read and Write Configurations

- Save refers to saving new configuration data to an XML file format on your computer and Open refers to opening configuration data that you saved on your computer.
- Read and Write refer to reading configuration data from a meriGauge plus or writing to it.

Data Log Lite

Preview tab

Preview the data log

The Preview tab displays the first 10 samples so you can confirm the data to save. If you have fewer than 10, it displays all of your samples.

Status, pressure, and temperature for logs

The Status symbols for pressure and temperature.

The \checkmark symbol corresponds to readings that are within the calibrated range.

- The $\uparrow \downarrow$ and \times symbols indicate an abnormal condition.
- The 11 symbol indicates readable data.
- The \times symbol indicates dashes and no readable data.

The Pressure

The pressure indicates the reading at each 15-second interval in the data set.

The Temperature

The temperature indicates the measured temperature at the sensor for each 15-second interval in the data set.

Note: See the figure below as an example of the preview tab. The figure is missing the Upgrade tab.

Save a data log file as a TSV file—only option

The **Save** button in **Data Log Lite** saves the data to a **Tab Separated Values (*.TSV)** file format. Due to differences in the use of commas, the TSV file format was selected.

Open a data log file as a TSV file

Double click a TSV file and if it opens in a spreadsheet program, then you don't need to do anything additional.

Associate the file type "TSV" with a program

If double clicking a TSV file *failed* to open it in a spreadsheet program, then you have to follow these steps:

- 1. Open the Control Panel in Windows 10, 8, or 7.
- 2. In the Control Panel, open Default Programs.
- 3. Click the Associate a file type or protocol with a program option.
- 4. Scroll through the list of file extensions until you locate ".tsv" and select it.
- 5. Click the Change program button.
- 6. Select the program you want to associate with it and click OK.

Note: If the program you want to select is not listed, click the Browse button and find the program's executable (.exe) file on the computer and click OK to select that program.

Drag and drop a TSV file into

Drag and drop TSV files to open them. The following steps are similar for these spreadsheet programs: **Microsoft Excel**, **OpenOffice Calc**, and **Google Sheets**.

1. Open **File Explorer** (Windows 8 and 10). Keep File Explorer small enough to see Excel in the background.

Note: Depending on which version of Windows you have, File Explorer may be known as Windows Explorer, File Manager, or My Computer.

- 2. Open **Excel**. It can have a blank spreadsheet or an existing spreadsheet. Drag and drop creates a new spreadsheet.
- 3. Switch to **File Explorer** and navigate to the location where you saved the TSV file.
- 4. Select the file and drag-and-drop it in the middle of the blank spreadsheet.
- 5. Save it as an **Excel** file.

Look for page breaks if you want to print

Excel has a feature called **Page Break Preview** to show you where the page breaks occur in the log file. Change the page breaks, rows to repeat at the top, and other settings as necessary so your printers do not waste paper.



Note: Other spreadsheet programs offer similar features.

Upgrade tab

Upgrade provides information and activation

The Upgrade tab has three areas to guide you through upgrading from Data Log Lite to Data Log Pro. It has:

- 1. A list of benefits that Data Log Pro offers you.
- 2. A contact
- 3. A enter activation key box and an activate button to replace Lite with Pro.

Note: The Activate Pro button remains dimmed until you enter an activation key number.

Data Log Pro

An optional purchase

List of benefits

You can:

- Log 100 000 data points.
- Set data logging intervals from 1 second to 24 hours.
- Set one of four data logging types.
- Select the duration: fixed time or fixed data points.
- Save logs to two file formats: TSV and PDF may not be added.

How many licenses do I need to operate Data Log Pro?

Do I need a license for each gauge? (meriGauge plus)

- One license covers one meriGauge (gauge) and an unlimited number of sensors, copies of meriLink, and computers.
- This license policy differs from some software licenses.

Do I need a license for each computer (meriLink)

• No license necessary.

Do I need a license for each sensor? (meriSense)

• No license necessary.

Order Data Log Pro or add it later

Order it installed:

You can order it so the meriGauge comes loaded and ready to use when you receive it. The Data Log Pro button appears on the meriLink dashboard.

Add it later

You may add Data Log Pro at any time by calling your distributor or contact the Meriam Sales Team:

Phone + 1 216 281 1100

E-mail sales@meriam.com

Adding it later means you have to enter the activation key:

Click the *Upgrade* tab in *Data Log Lite* to enter the **activation key** you received from a distributor or the Meriam Sales Team to activate Data Log Pro. After you click the *Activate Pro* button, **Data Log Pro** automatically replaces Data Log Lite in meriLink.

Files or Logs tab

View the list of logs on the gauge in the Files tab

The **Files** tab displays all the logs in the memory of the meriGauge.

Double click a log to open it in the **Preview** tab.



Preview tab

Overview of the Preview tab

When you double click a log, it switches to the Preview tab where the log opens.

	e meriLink						
	C Data Log Pro						
	Files Preview	Setup Upgrade	•				
1	- Data Log Informat	tion Sensor Infor	mation				2
-		On Dei Name:	meriSense				-
- 1		1 Model:	MS700-CI	0100			
- 1							
- 1		1 Seco LSL:	-14.50 PSI				
		24.92 § USL:	110.00 PSI				
2		6 Factory Cal:					
Э	Notes: No notes User Cal:						
3 4	Lagend: √ = good measurement, ↓t = just outside calibrated range, × = out of calibrated range						
	Time (24h)	Pressure (PSI)	Status	Temperature (°C)	Status		
	10:36:24	8.85	√	13.5	√		
	10:36:29	8.85		13.6			
	10:36:35	8.85		13.7			
	10:36:38	8.85		13.8			
	10:36:40	8.85		13.8			
	10:36:43	8.85		13.8			
6	- #** 4 6 , 6	н			Save		7
					ouve		,

The **Preview** tab contains seven areas of information:

- 1. Data Log Information list.
- 2. Sensor Information list.
- 3. Notes.
- 4. Legend.
- 5. Samples table.
- 6. Navigation bar.
- 7. Save button.

Details about the Preview tab

1. Data Log Information list

A description of items in this list:

- 1. **Log type** is the DataLog Type in the Setup tab.
- 2. **Stop condition** displays what stopped the log: the number of points or the time, or something else.
- 3. Collection Date is the day the log began or ended?
- 4. Interval does not display with the **On Demand** option.

- Duration displays how long the log actually recorded data. This may or may not be the Duration you selected in the Setup tab. Check the Stop condition.
- Samples indicates the number of readings in the log. (see my glossary)
- 2. Sensor Information list
 - This displays the **Name** you may have entered into the **Configuration** tab for a meriSense sensor.
 - If someone from your company set the **User Calibration** from the main window, this displays the date of that User Calibration.
 - All other information in this list has been retrieved from the sensor that was attached to the gauge for this particular log.
- 3. Notes

The information that displays here comes from the text you entered in the **Notes** box in **Setup** tab.

4. Legend for the status columns

The samples table has two columns for Status. The legend provides three symbols to indicate the level of accuracy for pressure and temperature. (**Temperature** is included only if you selected **Record temperature** in the **Setup** tab.)

- The ✓ symbol corresponds to readings that are within the calibrated range.
- 2. The $\uparrow \downarrow$ and \times symbols indicate an abnormal condition.
- 3. The [↑]J symbol indicates readable data but it is out of range.
- 4. The X symbol indicates dashes on the meriGauge plus and no readable data.
- 5. Samples table: pressure, and temperature
 - The **Pressure** column indicates the reading at each 15-second interval in the data set. Are these points true for Data Log Pro?
 - The **Temperature** column indicates approximate ambient temperature at each interval in the log.

- The bar provides you with buttons to jump to the first log or to the last log.
- The bar also provides you with buttons to navigate to the previous log or next log.
- The numbers in the bar indicate which log out of the total number of logs on the meriGauge plus that you are currently viewing.

7. Save button

Click the Save button on the right side and the Save As box appears. You can save the file in a TSV file format or a PDF file format. The default file name in the Save As box includes the meriGauge name, start date, and time.

- The start date appears in this format: YYYYMMDD (year month date).
- The time appears in this format: HHMMSS (hours minutes seconds).

Setup tab

Overview of the Setup tab

The Setup tab lists parameters you may enter. It gives you usage statistics and it displays three action buttons.

A yellow dot appears on this tab to remind you that you changed a setting and have not saved it.

Parameter Choices

Four logging types:

- 1. Individual Samples this means what?
- 2. Average only this means what?
- 3. Average with peaks this means what?
- 4. On Demand this means what?

Record temperature

You decide if you want to include temperature in the logs.

Two Interval types:

- 1. A number. (from 1-100,000)
- 2. Time: Seconds, minutes, or hours.

For example: Min-Once a second for 27.7 h? Max-Once every 24 h?

Duration types:

- 1. Fixed time.
- 2. Fixed points.

Notes

The Notes appear in Preview tab and the files. This field can hold up to 64 characters.

Usage statistics

Usage presents the amount of memory available on the gauge for data logging in two ways:

- 1. The number of data points used out of a maximum of 100 000.
- 2. The number of logs used out of a maximum of 128.

Delete all files (or all logs?) button

This button deletes all the logs on the meriGauge plus. This does not affect the files you saved in the **Preview** tab.

Get Setup button

This button displays the setup parameters that are on meriGauge plus.

Password protection?

Send Setup button

This button saves the setup parameters to the meriGauge. It overwrites whatever was on the gauge.

Password protection?

Help

Meriam Contact Information

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Find a local Meriam representative

Use this map to help you find a Meriam representative.

http://www.meriam.com/representatives-map/